

- 16 -

CLAIMS

1. A needle protection device comprising:

- a protector support (20) delimiting a passage for
5 accepting a syringe body (4);
- a needle protector (22) able to move with respect
to the protector support (20) between a retracted
position and a deployed position;
- a compression spring (24) pressing between the
10 protector support (20) and the needle protector (22);
and
- retaining means (38, 40, 54) for initially
restraining the needle protector (22) against the
action of the compressed spring (24), which means (38,
15 40; 54) can be released by moving the needle protector
(22) with respect to the protector support (20) in a
release direction, characterized in that it comprises
mechanical immobilizing means (56) for immobilizing the
needle protector (22) with respect to the protector
20 support (20) in the release direction when no syringe
body is present in the passage of the protector
support, which mechanical immobilizing means (56) can
be deactivated by engaging a syringe body (4) in the
passage of the protector support (20).

25

2. The needle protection device as claimed in
claim 1, characterized in that the mechanical
immobilizing means comprise at least one hook (56)
secured to a first element chosen from the protector
30 (22) and the support (20), the or each hook being able
to be moved between an immobilizing position in
abutment against the second element chosen from the
protector (22) and the support (20) when no syringe is
present and a mobilizing position away from the second
35 element chosen from the protector (22) and the support
(20) when a syringe is present, the or each hook (56)
having an actuating face (56B) actuated by the syringe
body (4) as it is engaged in the passage of the support

(20) to move the hook (56) from its immobilizing position to its mobilizing position.

3. The needle protection device as claimed in
5 claim 2, characterized in that the or each hook (56) has a protrusion projecting into the passage of the protector support (20) when the syringe body (4) is not present.

10 4. The needle protection device as claimed in any one of claims 2 and 3, characterized in that the or each hook (56) is secured to the needle protector (22).

5. The needle protection device as claimed in
15 claim 4, characterized in that the or each hook (56) has a cam surface (56B) and the protector support (20) comprises at least one ramp (57) able to collaborate with the or each cam surface (56B) to cause the or each hook (56) to become effaced on the outside of the
20 protector support (20).

6. The needle protection device as claimed in any one of claims 2 to 5, characterized in that the protector support (20) comprises a distal surface (44B) able to
25 collaborate with the or each hook (56) to keep the protector (20) in the deployed position.

7. An injection device comprising, on the one hand, a syringe (1) which comprises a needle (6), a tubular
30 body (4) to the distal end of which a needle (6) is fixed, and an injection piston (8) slidably mounted in the body (4) and, on the other hand, a needle protection device (2) as claimed in any one of the preceding claims.